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Proceedings of the 9th International Conference on Structural Health, Monitoring of Intelligent Infrastructure: Transferring Research into Practice

International Society for Structural Health Monitoring of Intelligent Infrastructure

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9th International Conference on Structural Health
Monitoring of Intelligent Infrastructure

TRANSFERRING RESEARCH INTO PRACTICE

August 4–7, 2019 | St. Louis, Missouri USA



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VOLUME 1

CONFERENCE PROCEEDINGS

Edited by:

Dr. Genda Chen
Professor and Director of
INSPIRE University Transportation Center
Missouri University of Science and Technology

Dr. Sreenivas Alampalli
Director of Structure Management Bureau
New York State Department of Transportation

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VOLUME 1



INTERNATIONAL SOCIETY FOR STRUCTURAL HEALTH MONITORING OF INTELLIGENT INFRASTRUCTURE



INTERNATIONAL SOCIETY FOR STRUCTURAL HEALTH MONITORING OF INTELLIGENT INFRASTRUCTURE



About the Editors

Dr. Genda Chen is Professor and Robert W. Abbett Distinguished Chair in Civil Engineering at Missouri University of Science and Technology (S&T), Director of INSPIRE University Transportation Center, Director of System and Process Assessment Research Laboratory, and Associate Director of Mid-America Transportation Center. He is a Fellow of American Society of Civil Engineers (ASCE), Structural Engineering Institute (SEI), and the International Society for Structural Health Monitoring of Intelligent Infrastructure (ISHMII). He is a Section Editor of the Intelligent Sensors, Associate Editor of the Journal of Civil Structural Health Monitoring, Editorial Board Member of Advances in Structural Engineering, and Vice President of the U.S. Panel on Structural Control and Monitoring.

Dr. Chen received his Ph.D. degree in Civil Engineering in 1992 and postdoc training in 1993 from the State University of New York at Buffalo. In 1996, he joined Missouri S&T after over three years of bridge design, inspection, and construction practices with Steinman Consulting Engineers in New York City. Since 1996, he has authored or co-authored over 400 technical publications in structural health monitoring, structural control, interface deterioration and mechanics, and multi-hazards assessment and mitigation, including 168 journal papers, 5 book chapters, and 24 keynote and invited presentations at international conferences. He received one patent on distributed coax cable strain/crack sensors and two patents on enamel coating of steel reinforcing bars for corrosion protection and steel-concrete bond strength. He received the 1998 National Science Foundation CAREER Award, the 2004 Academy of Civil Engineers Faculty Achievement Award, and the 2009, 2011, and 2013 Missouri S&T Faculty Research Awards. In 2016, he was nominated and inducted into the Academy of Civil Engineers at Missouri S&T and became an honorary member of Chi Epsilon.

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**9th International Conference on
Structural Health Monitoring of Intelligent Infrastructure**

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RESEARCH INTO PRACTICE**

August 4-7, 2019, St. Louis, Missouri USA

Conference Proceedings
Keynote Papers, Invited Papers, Technical Papers

VOLUME 1

Edited by:

Dr. Genda Chen

Professor and Director of INSPIRE University Transportation Center
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